

What is claimed is:

1. A data interchange system for executing a series of process flows among a plurality of process executing devices, the process executing device comprising:

5 a process executing data interchanging unit interchanging process executing data for executing a process with other process executing device, and
10 an interprocess association information interchanging unit interchanging with the other process executing device of interprocess association information that associates the process executed by the process executing device with the process executed by the other executing device.

- 15 2. The data interchange system according to Claim 1, wherein,
said interprocess association information is information that associates the processes with one
20 another using a part of the process executing data.

3. The data interchange system according to Claim 1, wherein,
said interprocess association information is part
25 of the process executing data, and is the information

for associating processes with each other using data that takes an exclusive value for each process of the series of process flows.

5 4. The data interchange system according to Claim 1,
 wherein,

 said interprocess association information
interchanging unit interchanges the interprocess
association information with the other process executing
10 device using a transfer method different from the method
 used by said process executing data interchanging unit.

 5. The data interchange system according to Claim 1,
 wherein,

15 said interprocess association information
interchanging unit interchanges the interprocess
association information at a timing that is not
synchronized with the timing for interchanging the
process executing data by said process executing data
20 interchanging unit.

 6. The data interchange system according to Claim 5,
 wherein,

 said interprocess association information
25 interchanging unit periodically and collectively

interchanges the interprocess association information .

7. The data interchange system according to Claim 5,
wherein,

5 said interprocess association information
interchanging unit transmits to the other process
executing device inquiry information for inquiring about
the process which is executed by the other process
executing device and is related with the process executed
10 by the process executing device in addition to the process
association information, and wherein

the other process executing device further
comprising:

15 an inquiry response unit associating the processes
executed by both process executing devices and responding
to the inquiry information from the process executing
device.

8. The data interchange system according to Claim 5,
20 wherein,

the process executing device further comprising:
a process association information request unit
requesting said interprocess association information
interchanging unit in the other process executing device
25 to transmit the interprocess association information

necessary for an inquiry about the process which is executed by the other process executing device and is which related to the process executed by the process executing device in addition to the process association information before the inquiry; and

an inquiry unit for associating the processes executed by both process executing devices using the transmitted process association information and performing the inquiry based on the association result.

9. The data interchange system according to Claim 1, wherein,

said interprocess association information interchanging unit dynamically determines the other process executing device to which the interprocess association information is transmitted using a part of the process executing data.

10. The data interchange system according to Claim 1, wherein,

said process executing device further comprising:
an association definition storing unit storing a method to define the interprocess association as an association definition; and

an association unit associating the process

executed by the process executing device with the process executed by the other process executing device.

11. The data interchange system according to Claim 1,
5 wherein,

said process executing device further comprising:
a device interprocess association unit
associating the processes executed by the process
executing device that are identical to the process
10 executed by the other process executing device using
the interprocess association information transmitted
from the other process executing device.

12. A data interchange system for executing a series
15 of process flows among a plurality of process executing
devices, comprising:

an interprocess association information storing
unit storing an interprocess association information
that associates a process executed by each of said
20 plurality of process executing devices with the process
executed by the other executing device, which is
transmitted by the plurality of process executing
devices; and

an interprocess association information
25 distribution unit distributing the interprocess

association information stored in said interprocess association information storing unit to the process executing device which is related to the interprocess association information.

5

13. The data interchange system according to Claim 12, further comprising:

an addressee definition storing unit storing a method for determining an addressee of the interprocess association information as an addressee definition,
10 and said interprocess association information distribution unit distributes interprocess association information based on the addressee definition.

15

14. The data interchange system according to Claim 12, wherein,

said interprocess association information distribution unit dynamically determines the addressee of the process association information using a part of a process executing data transmitted from the plurality
20 of process executing devices.

25

15. A data interchange system for executing a series of process flows among a plurality of process executing devices, comprising:

an interprocess association unit associating the processes executed among the plurality of process executing devices using the data transmitted from the plurality of process executing devices and generating process association information; and

an interprocess association information distribution unit distributing the process association information generated by said interprocess association unit to the process executing device which is related to the interprocess association information.

16. A data interchange device for interchanging data concerning a process included in a series of process flows with an external device, comprising:

an executing data interchanging unit interchanging a process executing data with the external device; and

an interprocess association information interchanging unit interchanging with the external device interprocess association information which associates a process executed by the process executing device with the process executed by the external device.

17. A data interchange method for interchanging data concerning a process included in a series of process

flows with an external device, comprising:

interchanging process executing data with the external device; and

interchanging with the external device
5 interprocess association information which associates the process executed by the process executing device with the process executed by the external device.

18. The data interchange method according to Claim 17,
10 wherein,

in interchanging the interprocess association information, the process executing device uses a data transfer method different from a method for interchanging the process executing data.

15

19. A storage medium which stores a program to make a computer to control interchanging data concerning a process included in a series of process flows with an external device, the program to make said computer
20 perform the step of:

interchanging process executing data with the external device; and

interchanging with the external device
interprocess association information which associates
25 the process executed by the process executing device

with the process executed by the external device.

20. The storage medium according to Claim 19, wherein,
 in interchanging the interprocess association
 5 information, the process executing device uses a data
 transfer method different from a method for interchanging
 the process executing data.

21. A data interchange device for interchanging data
 10 concerning a process included in a series of process
 flows with an external device, comprising:

executing data interchanging means for
 interchanging process executing data with the external
 device; and

15 interprocess association information
 interchanging means for interchanging with the external
 device interprocess association information which
 associates the process executed by the process executing
 device with the process executed by the external device.

20

22. A computer data signal embodied in a carrier wave
 and representing a program that makes a computer to
 control interchanging data concerning a process included
 in a series of process flows with an external device,
 25 and the program making the computer execute the step

of:

interchanging process executing data with the
external device; and

- interchanging with the external device
- 5 interprocess association information which associates
the process executed by the process executing device
with the process executed by the external device.